

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA,
Alexandria Division**

Spherix Incorporated.,

Plaintiff,

vs.

Verizon Services Corp.; Verizon South Inc.;
Verizon Virginia LLC; Verizon
Communications Inc.; Verizon Federal Inc.;
Verizon Business Network Services Inc.; MCI
Communications Services, Inc.,

Defendants.

Case No. 1:14-cv-721-GBL-TCB

DEMAND FOR JURY TRIAL

**FIRST AMENDED ANSWER OF VERIZON ENTITIES TO PLAINTIFF'S AMENDED
COMPLAINT**

Defendants Verizon Services Corp.; Verizon South Inc.; Verizon Virginia LLC; Verizon Communications Inc.; Verizon Federal Inc.; Verizon Business Network Services Inc.; and MCI Communications Services, Inc. (collectively, and including their predecessors by merger and acquisition, "Verizon"), by and through the undersigned counsel, hereby respond to the Amended Complaint for Patent Infringement (Dkt. No. 23, "the Complaint") filed by Spherix Incorporated ("Spherix") as follows:

PRELIMINARY STATEMENT

Spherix has filed the Complaint in this matter against Verizon. Verizon's investigation and discovery regarding the allegations brought by Spherix and Verizon's defenses thereto is ongoing. While Verizon files this Answer to the best of its knowledge and ability, Verizon reserves the right to supplement or amend this Answer to include additional defenses and/or counterclaims that are discovered during the course of this lawsuit.

THE PARTIES

1. The allegations in Paragraph 1 of the Complaint are not directed at Verizon and Verizon lacks knowledge or information sufficient to form a belief about the truth of the allegations in Paragraph 1 of the Complaint.

2. Verizon Services Corp. (“Verizon Services”) admits that it is incorporated in Delaware. Verizon Services denies that its principal place of business is at 1310 North Courthouse Road, Arlington, Virginia 22201. Verizon Services’ principal place of business is at 22001 Loudoun County Parkway, Ashburn, Virginia 20147.

3. Verizon South Inc. (“Verizon South”) admits that it is incorporated in the Commonwealth of Virginia. Verizon South denies that its principal place of business is at 703 East Grace Street, Richmond, Virginia 23219. Verizon South’s principal place of business is at 22001 Loudoun County Parkway, Ashburn, Virginia 20147.

4. Verizon Virginia LLC (“Verizon Virginia”) admits that it is incorporated in Virginia. Verizon Virginia denies that its principal place of business is at 703 East Grace Street, Richmond, Virginia 23219. Verizon Virginia’s principal place of business is at 22001 Loudoun County Parkway, Ashburn, Virginia 20147.

5. Verizon Communications Inc. (“Verizon Communications”) admits that it is incorporated in Delaware. Verizon Communications denies that its principal place of business is at 140 West Street, New York, New York 10013. Verizon Communications’ principal place of business is at 1095 Avenue of the Americas, 8th Floor, New York, New York 10036. Verizon Communications admits that it can be served with process through its agent CT Corporation System, 4701 Cox Road, Suite 285, Glen Allen, Virginia 23060.

6. Verizon Federal Inc. (“Verizon Federal”) admits that it is incorporated in Delaware with its principal place of business at 22001 Loudoun County Parkway, Ashburn, Virginia 20147.

7. Verizon Business Network Services Inc. (“Verizon Business”) admits that it is incorporated in Delaware with its principal place of business at One Verizon Way, Basking

Ridge, New Jersey 07920. Verizon Business admits that it can be served with process through its agent CT Corporation System, 4701 Cox Road, Suite 285, Glen Allen, Virginia 23060.

8. MCI Communications Services, Inc. (“MCI”) admits that it is incorporated in Delaware with its principal place of business at One Verizon Way, Basking Ridge, New Jersey 07920. MCI admits that it can be served with process through its agent CT Corporation System, 4701 Cox Road, Suite 285, Glen Allen, Virginia 23060.

JURISDICTION

9. Verizon admits that this action purports to arise under the patent laws of the United States, 35 U.S.C. § 1 *et seq.* Verizon further admits that this Court has jurisdiction over actions for patent infringement pursuant to 28 U.S.C. §§ 1331 and 1338. Verizon denies the remaining allegations in Paragraph 9 of the Complaint.

10. Verizon Services submits to the jurisdiction of this Court for this action only. Verizon Services admits that it has its primary place of business in Ashburn, Virginia. Verizon Services admits that it has transacted business in this District and has filed lawsuits in this District. Verizon Services denies the remaining allegations of Paragraph 10 of the Complaint.

11. Verizon South submits to the jurisdiction of this Court for this action only. Verizon South admits that it is incorporated in Virginia and has its principal place of business in Ashburn, Virginia. Verizon South admits that it has transacted business in this District and has filed lawsuits in this District. Verizon South denies the remaining allegations of Paragraph 11 of the Complaint.

12. Verizon Virginia submits to the jurisdiction of this Court for this action only. Verizon Virginia admits that it is incorporated in Virginia with its principal place of business in Ashburn, Virginia. Verizon Virginia admits that it has transacted business in this District and has filed lawsuits in this District. Verizon Virginia denies the remaining allegations in Paragraph 12 of the Complaint.

13. Verizon Communications submits to the jurisdiction of this Court for this action only. Verizon Communications admits that it is registered to do business, and maintains a

registered agent for service of process, in this District. Verizon Communications admits that it has transacted business in this District and has filed lawsuits in this District. Verizon Communications denies the remaining allegations of Paragraph 13 of the Complaint.

14. Verizon Federal submits to the jurisdiction of this Court for this action only. Verizon Federal admits that it has its principal place of business in Ashburn, Virginia. Verizon Federal admits that it has transacted business in this District. Verizon Federal denies the remaining allegations in Paragraph 14 of the Complaint.

15. Verizon Business and MCI submit to the jurisdiction of this Court for this action only. Verizon Business and MCI admit that they are registered to do business, and maintain a registered agent for service of process, in this District. Verizon Business and MCI admit that they have transacted business in this District and have filed lawsuits in this District. Verizon Business and MCI deny the remaining allegations of Paragraph 15 of the Complaint.

VENUE

16. Verizon acknowledges that it has transacted business in this District. Verizon admits that venue is proper in this District, but denies that it is convenient or in the interests of justice under 28 U.S.C. § 1404(a). The remaining allegations in Paragraph 16 of the Complaint are conclusions of law to which no response is required.

BACKGROUND

17. Verizon admits that the Complaint purports to assert causes of action for infringement of United States Patent Nos. 6,507,648; 6,882,800; 6,980,564; 7,478,167; and 8,166,533 (the “Asserted Patents”). On information and belief, Verizon admits that, at the time they were issued, the Asserted Patents were assigned to Nortel Networks Corp. or its subsidiaries and affiliates (collectively, “Nortel”). Verizon denies the remaining allegations of Paragraph 17 of the Complaint.

18. On information and belief, Verizon admits that Nortel filed for bankruptcy protection and that Nortel sold a portion of its patent assets to a company known as “Rockstar

Bidco, LP.” Verizon lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 18 of the Complaint.

19. On information and belief, Verizon admits that Alexander Graham Bell invented the telephone, for which he received United States Patent No. 174,465 in 1876. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 19 of the Complaint.

20. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 20 of the Complaint.

21. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 21 of the Complaint.

22. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 22 of the Complaint.

23. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 23 of the Complaint.

24. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 24 of the Complaint.

25. On information and belief, Verizon admits that Nortel filed for bankruptcy protection in 2009 and that Nortel sold a portion of its patent assets to a company known as “Rockstar Bidco, LP.” Verizon lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 25 of the Complaint.

26. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 26 of the Complaint.

27. On information and belief, Verizon admits that Spherix was founded in 1967. Verizon admits that Spherix’s common stock trades on the NASDAQ Market under the ticker symbol SPEX. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 27 of the Complaint.

28. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 28 of the Complaint.

29. Verizon lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 29 of the Complaint.

30. Verizon admits that it is one of the world's leading providers of communications, information and entertainment products and services to consumers, businesses, and governmental agencies. Verizon admits that it operates one of the largest Internet Protocol (IP) networks, and one of the largest optical networks, in the world, each of which is used to provide voice and data services to customers within the United States. Verizon admits that it has a workforce of more than 176,000 employees, and that its consolidated revenue for 2013 was more than \$120 billion.

31. Verizon Services admits that it operates IP networks in the United States, including in the Eastern District of Virginia. Verizon Communications admits that it uses IP networks to offer various services, including FiOS, VoIP, and internet services in the Commonwealth of Virginia, including in the Eastern District of Virginia. Verizon Communications, Verizon South, Verizon Virginia, Verizon Federal, Verizon Business, and MCI deny the allegations contained in Paragraph 31 of the Complaint.

32. Verizon Services, Verizon Business and Verizon Virginia admit that they provide telephony services in the United States, including in the Eastern District of Virginia. Verizon Communications, Verizon South, Verizon Federal, and MCI deny the allegations contained in Paragraph 32 of the Complaint.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 6,507,648

33. Verizon admits that, according to the records of the U.S. Patent and Trademark Office ("PTO"), on January 14, 2003, the PTO issued U.S. Patent No. 6,507,648 ("the '648 patent") with Kevin W. Golka, John R. Donak and Lorne A. Porter as the named inventors. On information and belief, Verizon admits that Exhibit A to the Complaint is a copy of the '648 patent. Verizon denies the remaining allegations in Paragraph 33 of the Complaint.

34. Verizon denies all allegations contained in Paragraph 34 of the Complaint.

35. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: “The parties have agreed to withdraw the indirect infringement claim here, so what’s left is a claim of direct infringement.”); *see also* D.I. 48 at 8 (Spherix’s Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 35 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 35 of the Complaint.

36. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: “The parties have agreed to withdraw the indirect infringement claim here, so what’s left is a claim of direct infringement.”); *see also* D.I. 48 at 8 (Spherix’s Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 36 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 36 of the Complaint.

37. Verizon denies all allegations contained in Paragraph 37 of the Complaint.

COUNT II
INFRINGEMENT OF U.S. PATENT NO. 6,882,800

38. Verizon admits that, according to the records of the PTO, on April 19, 2005, the PTO issued U.S. Patent No. 6,882,800 (“the ’800 patent”) with Alan F. Graves as the named inventor. On information and belief, Verizon admits that Exhibit B to the Complaint is a copy of the ’800 patent. Verizon denies the remaining allegations in Paragraph 38 of the Complaint.

39. Verizon denies all allegations contained in Paragraph 39 of the Complaint.

40. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: “The parties have agreed to withdraw the indirect infringement claim here, so what’s left is a claim of direct infringement.”); *see also* D.I. 48 at 8 (Spherix’s Opposition to

Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 40 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 40 of the Complaint.

41. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: “The parties have agreed to withdraw the indirect infringement claim here, so what’s left is a claim of direct infringement.”); *see also* D.I. 48 at 8 (Spherix’s Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 41 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 41 of the Complaint.

42. Verizon denies all allegations contained in Paragraph 42 of the Complaint.

**COUNT III
INFRINGEMENT OF U.S. PATENT NO. 6,980,564**

43. Verizon admits that, according to the records of the PTO, on December 27, 2005, the PTO issued U.S. Patent No. 6,980,564 (“the ’564 patent”) with Juan O. Rodriguez, David J. Berman, and James D. Lakin as the named inventors. On information and belief, Verizon admits that Exhibit C to the Complaint is a copy of the ’564 patent. Verizon denies the remaining allegations in Paragraph 43 of the Complaint.

44. Verizon Services, Verizon South, Verizon Virginia, and Verizon Communications deny all the allegations contained in Paragraph 44 of the Complaint. The allegations in Paragraph 44 of the Complaint are not directed at Verizon Federal, Verizon Business, or MCI, and therefore require no response from those entities.

45. The allegations in Paragraph 45 of the Complaint are not directed at Verizon Federal, Verizon Business, or MCI, and therefore require no response from those entities. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: “The parties have agreed to withdraw the indirect infringement claim here, so what’s left

is a claim of direct infringement.”); *see also* D.I. 48 at 8 (Spherix’s Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 45 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 45 of the Complaint.

46. The allegations in Paragraph 46 of the Complaint are not directed at Verizon Federal, Verizon Business, or MCI, and therefore require no response from those entities. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: “The parties have agreed to withdraw the indirect infringement claim here, so what’s left is a claim of direct infringement.”); *see also* D.I. 48 at 8 (Spherix’s Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 46 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 46 of the Complaint.

47. Verizon Services, Verizon South, Verizon Virginia, and Verizon Communications deny all the allegations contained in Paragraph 47 of the Complaint. The allegations in Paragraph 47 of the Complaint are not directed at Verizon Federal, Verizon Business, or MCI, and therefore require no response from those entities.

COUNT IV INFRINGEMENT OF U.S. PATENT NO. 8,166,533

48. Verizon admits that, according to the records of the PTO, on April 24, 2012, the PTO issued U.S. Patent No. 8,166,533 (“the ’533 patent”) with Wei Yuan as the named inventor. On information and belief, Verizon admits that Exhibit D to the Complaint is a copy of the ’533 patent. Verizon denies the remaining allegations in Paragraph 48 of the Complaint.

49. Verizon denies all allegations contained in Paragraph 49 of the Complaint.

50. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: “The parties have agreed to withdraw the indirect infringement claim here,

so what's left is a claim of direct infringement."); *see also* D.I. 48 at 8 (Spherix's Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 50 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 50 of the Complaint.

51. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: "The parties have agreed to withdraw the indirect infringement claim here, so what's left is a claim of direct infringement."); *see also* D.I. 48 at 8 (Spherix's Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 51 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 51 of the Complaint.

52. Verizon denies all allegations contained in Paragraph 52 of the Complaint.

COUNT IV
INFRINGEMENT OF U.S. PATENT NO. 7,478,167

53. Verizon admits that, according to the records of the PTO, on January 13, 2009, the PTO issued U.S. Patent No. 7,478,167 ("the '167 patent") with Hamid Ould-Brahim and Donald Fedyk as the named inventor. On information and belief, Verizon admits that Exhibit E to the Complaint is a copy of the '167 patent. Verizon denies the remaining allegations in Paragraph 53 of the Complaint.

54. Verizon denies all allegations contained in Paragraph 54 of the Complaint.

55. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: "The parties have agreed to withdraw the indirect infringement claim here, so what's left is a claim of direct infringement."); *see also* D.I. 48 at 8 (Spherix's Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 55 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 55 of the Complaint.

56. Plaintiff has withdrawn its indirect infringement allegations, including the indirect infringement allegations in this paragraph. *See* Transcript of Motion to Dismiss Hearing at 22:11-13 (The Court: “The parties have agreed to withdraw the indirect infringement claim here, so what’s left is a claim of direct infringement.”); *see also* D.I. 48 at 8 (Spherix’s Opposition to Motion to Dismiss First Amended Complaint). Thus, Verizon is not required to respond to the allegations contained in Paragraph 56 of the Complaint. Nonetheless, Verizon denies all allegations contained in Paragraph 56 of the Complaint.

57. Verizon denies all allegations contained in Paragraph 57 of the Complaint.

PRAYER FOR RELIEF

58. Verizon denies that Spherix is entitled to any relief, either as prayed for in its Complaint or otherwise.

GENERAL DENIAL

59. Verizon further denies each and every allegation contained in the Complaint to which Verizon has not specifically admitted, denied, or otherwise responded to herein.

VERIZON’S DEFENSES

60. Without waiver, limitation, or prejudice, Verizon asserts the following defenses in response to the allegations in the Complaint, undertaking the burden of proof only as to those defenses deemed affirmative defenses by law, regardless of how such defenses are denominated herein.

BACKGROUND

Verizon’s Partnership With Nortel

61. By market capitalization, Verizon is the largest provider of telephone and internet services in the United States. Verizon has a storied history as one of the preeminent innovators in the field of telecommunications and IP networking. For their innovations, Verizon and its predecessors have been issued and currently possess more than 4,000 U.S. patents.

62. Beginning in the 1990s, Verizon invested billions of dollars to construct and maintain one of the largest fiber-optic networks in the United States. This network provides high-speed Internet, telephone, and television services to millions of customers each year.

63. One of Verizon's primary partners in the construction and maintenance of its fiber optic network was Nortel. Prior to dissolution in 2011, Nortel was one of the world's largest suppliers and manufacturers of fiber-optic network equipment.

64. Prior to Nortel's bankruptcy, Nortel sold communications and data networking products and services to Verizon thereby generating significant revenue for Nortel. For example, Nortel was Verizon's lead supplier and partner in the development of Verizon's Synchronous Optical Networking (SONET) fiber optic backbone network. Verizon and Nortel collaborated extensively on that project and their respective employees worked closely for many years. As part of that relationship, Nortel performed interoperability testing to ensure that equipment that Verizon acquired from other vendors for use in various parts of its network would operate properly with the technology that Nortel supplied. As a result of these extensive interactions with Verizon, Nortel acquired significant knowledge about various aspects of Verizon's systems.

65. Nortel maintained a portfolio of patents that included more than 6,000 patents and patent applications, related to a wide range of technologies (the "Nortel Patent Portfolio").

66. During the lengthy strategic partnership between Verizon and Nortel, Nortel never accused Verizon of infringing any of the Asserted Patents.

Sale of the Nortel Patent Portfolio

67. On January 14, 2009, Nortel filed for bankruptcy protection in the United States, Canada, and the United Kingdom. During the bankruptcy proceedings, Nortel auctioned various business units and other assets. The last major asset to be liquidated in the bankruptcy proceedings was the Nortel Patent Portfolio.

68. In June 2011, a non-practicing entity known as Rockstar Bidco purchased the Nortel Patent Portfolio at auction. On information and belief, shortly after acquiring the Nortel Patent Portfolio, Rockstar Bidco was reorganized into Rockstar Consortium ("Rockstar").

Rockstar produces no products and practices no patents. Public reports confirm that, in the first two months following its purchase of the Nortel Patent Portfolio, Rockstar sought licenses from as many as 100 companies.

69. On information and belief, during the second half of 2013, Rockstar transferred more than 100 of the patents in the Nortel Patent Portfolio — including the Asserted Patents — to Spherix in return for cash considerations and Spherix common stock. On information and belief, Rockstar will receive a percentage of future profits that Spherix generates from enforcing the transferred patents.

70. On information and belief, since acquiring the Nortel Patent Portfolio, Rockstar and Spherix have initiated more than 15 lawsuits against some of the nation's largest telecommunications providers and manufacturers.

Nortel's Participation in Standards Setting Organizations

71. Technical standards for communications and data networking technologies are usually developed through the efforts of standards development organizations ("SDOs"), whose membership includes industry participants, such as hardware manufacturers, software designers, and service providers. The standards established by SDOs play a significant role in the development of communications and data networking technologies because they facilitate, for example, adoption of new technologies and the development of interoperable hardware.

72. SDOs promulgate policies and procedures that control the disclosure and licensing of patents held by standard setting participants that may read on standards under consideration by the SDO. Those policies and procedures are typically set out in each SDO's bylaws or intellectual property rights policies ("IPR policies").

73. IPR policies generally require participants to disclose patents that relate to the standards being considered by the SDO. Those disclosures allow the SDO and its members to evaluate technologies with full knowledge of patent rights that may affect the industry-wide cost of adopting a certain technology as part of a new standard.

74. At the time a participant discloses patents that might relate to a standard being considered by an SDO, an IPR policy generally requires the participant to commit to provide licenses to all parties interested in implementing the industry standard on fair, reasonable, and non-discriminatory (“F/RAND”) or royalty-free terms.

75. Before its bankruptcy, Nortel stated that it participated in “85 global, regional, and national standards organizations, forums and consortia, spanning IT and telecom” including many organizations in which Nortel held leadership positions. (*See* Exhibit 1 at 14 (Nortel Networks Limited 10-K, Dec. 31, 2008)). The SDOs in which Nortel participated included the Institute of Electrical and Electronics Engineers (“IEEE”), the International Telecommunications Union (“ITU”), the Internet Engineering Task Force (“IETF”), the Alliance for Telecommunication Industry Solutions (“ATIS”), the European Telecommunications Standard Institute (“ETSI”), the World Wide Web Consortium (“W3C”), the Telecommunications Industry Association (“TIA”), and the Broadband Forum.

76. On information and belief, at all times relevant here, the IPR policies of SDOs in which Nortel participated required participants that owned standard-essential patents (“SEPs”) to disclose those patents to the SDO, and to license those patents to any party interested in practicing the standard on F/RAND or royalty-free terms.

77. At least one claim of U.S. Patent No. 6,507,648 is unenforceable due to misconduct in connection with Standard Setting Organizations, including conduct giving rise to an implied waiver. The ITU had policies governing intellectual property rights that required disclosure of relevant patents or pending patent applications (as well as willingness to license) by parties participating in ITU work. Nortel and its employees were active participants in the ITU, but failed to make disclosures concerning the ’648 patent or application in connection with the ITU’s work related to MLPP, including in connection with ITU-T Recommendation H.460.14 (2004).

78. At least one claim of U.S. Patent No. 7,478,167 is unenforceable due to misconduct in connection with Standard Setting Organizations, including conduct giving rise to

an implied waiver. The IETF had policies governing intellectual property rights that required persons making contributions and other participants to disclose any current or pending proprietary or intellectual property rights relating to a contribution, including any patents or pending patent applications, among other disclosures. Nortel and its employees, including the '167 inventors, were active contributors and participants at the IETF, but failed to make disclosures concerning the '167 patent or application in connection with their contributions, and participation in discussions, related to auto-discovery and tunnels in PPVPNs, including in connection with the following IETF documents:

draft-ietf-l3vpn-bgpvpn-auto

draft-ietf-ppvpn-bgpvpn-auto

draft-ietf-l3vpn-vpn-vr

draft-ietf-ppvpn-vpn-vr

RFC 4761

draft-ietf-l2vpn-vpls-bgp

draft-ietf-ppvpn-vpls-bgp

draft-kompella-ppvpn-vpls

RFC 4762

draft-ietf-l2vpn-vpls-ldp

draft-ietf-ppvpn-vpls-ldp

draft-lasserre-vkompella-ppvpn-vpls

RFC 4364

draft-ietf-l3vpn-rfc2547bis

draft-ietf-ppvpn-rfc2547bis

RFC 4684

draft-ietf-ppvpn-bgp-ipv6-vpn

RFC 6624

draft-kompella-l2vpn-l2vpn

draft-kompella-ppvpn-l2vpn
RFC 6513
RFC 6514
draft-ietf-l3vpn-2547bis-mcast
draft-ietf-l3vpn-2547bis-mcast-bgp
draft-raggarwa-l3vpn-2547bis-mcast-bgp
draft-xu-l3vpn-2547bis-mcast
draft-menezes-hierarchical-mpls-service
draft-ouldbrahim-ppvpn-gvpn-bgpgmpls
RFC5195
draft-ouldbrahim-l1vpn-bgp-auto-discovery
RFC 4110
draft-ietf-l3vpn-framework
RFC 6074
draft-ietf-l2vpn-signaling

79. By specific letters of assurance (“LOAs”) to each of the IEEE, ITU, and IETF, Nortel made at least 57 commitments to license SEPs on F/RAND or royalty-free terms.

80. By general LOAs to each of the IEEE, ITU, IETF, ATIS, ETIS, TIA, and Broadband Forum SDOs, Nortel made general commitments to license on F/RAND or royalty-free terms all of its patents that are essential to implement particular standards, or in the case of the IETF, all of its patents that are essential to implement any IETF standard to which Nortel contributed.

81. For example, as documented in Exhibit 2, Nortel made the following commitment to the IETF: “Nortel Networks may seek patent rights on technology described in a document which Nortel Networks contributes for use in the IETF standards discussions or standards track specifications. If such patented technology is essential for the implementation, use, and distribution, of an IETF standard, Nortel Networks is willing to make available nonexclusive

licenses on fair, reasonable, and non-discriminatory terms and conditions, to such patent rights it owns, solely to the extent such technology is essential to comply with such IETF standard.”

82. Industry participants, such as Verizon, are implied licensees and third-party beneficiaries to Nortel’s agreements and commitments described above to license on F/RAND or royalty-free terms its patents.

83. Nortel benefited in numerous ways from having its technologies adopted by SDOs for inclusion in standards.

84. Spherix has asserted the Asserted Patents in an inconsistent and discriminatory manner in violation of its F/RAND obligations by, for example, asserting the patents against Verizon but not against other telecommunications providers.

85. Spherix has also acted inconsistently with its F/RAND obligations by suing Verizon before offering Verizon the opportunity to license the Asserted Patents under F/RAND terms.

86. Paragraphs 61 through 84 are incorporated by reference into the following defenses.

**FIRST DEFENSE
(Invalidity)**

87. Spherix’s purported claims for infringement of the Asserted Patents are barred because the claims of those patents are invalid for failure to comply with the requirements of Title 35, United States Code, including at least §§ 101, 102, 103, and/or 112.

**SECOND DEFENSE
(Marking)**

88. Spherix is barred in whole or in part from recovering damages as provided in and limited by 35 U.S.C. § 287.

**THIRD DEFENSE
(Time Limitation on Damages)**

89. Spherix is barred from recovering any damages for any infringement committed more than six years prior to the filing of the complaint as provided in and limited by 35 U.S.C. § 286.

FOURTH DEFENSE
(United States Government Conduct)

90. In the Complaint, Spherix alleges that Verizon infringes U.S. Patent No. 6,507,648 by making, using, selling and/or offering for sale switching units, software and/or methods for processing call requests, and/or related products and/or services, that implement Multilevel Precedence and Preemption (MLPP). To the extent that Verizon has engaged in such activities, it has done so as a contractor for the United States Government with the authorization and consent of the United States Government.

91. Spherix's claims are barred, in whole or in part, by 28 U.S.C. § 1498(a).

FIFTH DEFENSE
(Prosecution Estoppel)

92. The claims of the Asserted Patents are, and were, limited by amendment, by the prior art, and/or by the statements made during their prosecutions before the PTO, such that Spherix is now estopped, and otherwise precluded, from maintaining that such claims of the Asserted Patents are of sufficient scope to cover the accused products and methods, either literally or under the doctrine of equivalents.

SIXTH DEFENSE
(Exhaustion or License)

93. On information and belief, Verizon purchased devices that Spherix accuses of infringement from companies that were licensed to practice the asserted patent. Spherix's claims are barred, in whole or in part, by the doctrine of exhaustion or because Verizon has a license to one or more of the Asserted Patents.

SEVENTH DEFENSE
(Equitable Estoppel)

94. Paragraphs 61 through 84 are incorporated by reference into this defense.

95. Spherix's claims are barred, in whole or in part, by the doctrine of equitable estoppel. Nortel misled Verizon through its words, conduct and/or silence, to reasonably infer that Nortel did not intend to enforce the Asserted Patents against Verizon. Verizon detrimentally relied on Nortel's words, conduct and/or silence, and would be materially prejudiced if Spherix, Nortel's successor-in-interest to the Asserted Patents, was permitted to proceed with a claim against Verizon for infringement of the Asserted Patents.

**EIGHTH DEFENSE
(Waiver)**

96. Paragraphs 61 through 84 are incorporated by reference into this defense.

97. Spherix's claims are barred, in whole or in part, by the doctrine of waiver. In the context of the business relationship that existed between Nortel and Verizon, Nortel intentionally relinquished its known rights to assert the Asserted Patents against Verizon.

**NINTH DEFENSE
(Implied Waiver)**

98. Paragraphs 61 through 84 are incorporated by reference into this defense.

99. Spherix's claims are barred, in whole or in part, by the doctrine of implied waiver. Nortel's conduct in light of its obligations to standards setting organizations was inconsistent with an intent to enforce its rights related to one or more of the Asserted Patents and induced a reasonable belief that those rights had been relinquished. As Nortel's alleged successor-in-interest to the ownership of the Asserted Patents, Spherix is barred from asserting the Asserted Patents against Verizon.

**TENTH DEFENSE
(Implied License)**

100. Paragraphs 61 through 84 are incorporated by reference into this defense.

101. Spherix's claims are barred, in whole or in part, by the doctrine of implied license. Nortel's words, conduct and/or silence reasonably led Verizon to infer that Nortel consented to Verizon's use of technology covered by the Asserted Patents. Through its words, conduct, and/or silence, Nortel acquiesced in Verizon's use of the Asserted Patents, gave to

Verizon an affirmative grant of consent or permission to use the Asserted Patents, and conveyed an implied license to Verizon with respect to the Asserted Patents. Nortel received valuable consideration in exchange for that grant. Verizon detrimentally relied on Nortel's words, conduct and/or silence, and would be materially prejudiced if Spherix, Nortel's successors-in-interest to the Asserted Patents, were permitted to proceed with a claim against Verizon for infringement of the Asserted Patents in derogation from the rights granted by Nortel.

ELEVENTH DEFENSE
(Laches)

102. Paragraphs 61 through 84 are incorporated by reference into this defense.

103. Spherix's claims are barred, in whole or in part, by the doctrine of laches. Nortel and its successors-in-interest unreasonably and inexcusably delayed in informing Verizon that it allegedly infringes the Asserted Patents. Verizon incurred material prejudice attributable to such delay.

TWELFTH DEFENSE
(Lack of Standing)

104. Spherix lacks standing to enforce one or more of the Asserted Patents.

THIRTEENTH DEFENSE
(Lack of Title)

105. Spherix is barred from asserting one or more of the Asserted Patents, or lacks standing to enforce one or more of the Asserted Patents, because it does not have good title to one or more the Asserted Patents.

FOURTEENTH DEFENSE
(Champerty and Maintenance)

106. Spherix is barred from asserting one or more of the Asserted Patents, or lacks standing to enforce one or more of the Asserted Patents, by the doctrines of champerty and maintenance. On information and belief, Rockstar did not convey all of its rights, title, and interest to Spherix in the Asserted Patents and still retains significant control over and a significant financial interest in the Asserted Patents and their enforcement.

FIFTEENTH DEFENSE

(Failure to Mitigate)

107. Spherix's claims are barred, in whole or in part, by Spherix's failure to mitigate damages, if any.

**SIXTEENTH DEFENSE
(Statute of Limitations)**

108. Spherix's claims are barred, in whole or in part, by 35 U.S.C. § 286 for any allegedly infringing acts occurring more than six years before the filing of this lawsuit.

**SEVENTEENTH DEFENSE
(F/RAND Obligation)**

109. Paragraphs 61 through 84 are incorporated by reference into this defense.

110. Spherix's claims and/or its right to recovery are barred, in whole or in part, because Spherix and/or its predecessors-in-interest agreed to license one or more of the Asserted Patents on either royalty-free or on fair, reasonable and non-discriminatory ("F/RAND") terms as part of agreements entered into with one or more Standard Development Organizations ("SDOs").

**EIGHTEENTH DEFENSE
(Inequitable Conduct)**

111. On information and belief, numerous agents of Nortel, including the named inventors, prosecuting attorneys, and/or other agents of Nortel associated with the filing and prosecution of the application for U.S. Patent No. 6,507,648 owed a duty of candor to the PTO, and one or more of such persons knew of material information that they failed to disclose to the PTO, and acted with the intent to deceive the PTO. In particular, on information and belief, one or more of the persons associated with the filing and prosecution of the '648 patent were aware of substantial and material prior art related to Multilevel Precedence and Preemption (MLPP) at the time of prosecution of the application for the '648 patent, but did not disclose it to the PTO. This prior art includes: (1) industry standards and printed publications pertaining to MLPP, including the following ITU and ANSI standards documents: ITU Recommendation I.255.3 (1990), ITU Recommendation Q.85.3 (1992), ITU Recommendation Q.955.3 (1993), ANSI

T1.619-1992, and ANSI T1.619a-1994; (2) equipment used by the United States military in its Defense Switched Network and AUTOVON systems to implement MLPP; (3) equipment manufactured and sold by Nortel that implemented MLPP, including but not limited to DMS-100 switches and private branch exchange and end office switching equipment that Nortel manufactured and sold to Verizon for use in U.S. Department of Defense networks. The PTO would not have allowed one or more claims of the '648 patent had it been aware of this undisclosed material information. The PTO would have concluded, for example, that the claims of the '648 patent were anticipated under section 102 (including by being described in a printed publication and through the on-sale bar) and/or rendered obvious under section 103 in light of this prior art.

112. At least one claim of U.S. Patent No. 7,478,167 is unenforceable due to inequitable conduct in filing and prosecuting the application for the patent and in procuring the patent, in violation of 37 C.F.R. 1.56. Upon information and belief, the named inventors, prosecuting attorneys, and/or other agents of Nortel associated with the filing and prosecution of the application for the '167 patent owed a duty of candor to the PTO, that one or more of such persons knew of material information that they failed to disclose to the PTO, and acted with the intent to deceive the PTO. In particular, one or more persons associated with the filing and prosecution of the '167 patent were aware of substantial and material prior art related to auto-discovery mechanisms for provider-provisioned Layer-2 and Layer-3 virtual private networks, and the establishment and configuration of tunnels in such networks, at the time of prosecution of the application for the '167 patent, but did not disclose it to the PTO. For example, the application for the '167 patent disclosed an IETF internet draft authored by inventor Hamid Ould-Brahim and others entitled "Using BGP as an Auto-Discovery Mechanism for Network-Based VPNs." This cited reference was said to be dated August 2002, which is after March 18, 2002, the filing date of the provisional application to which the applicants for the '167 patent claimed priority. But the inventors failed to disclose to the PTO that earlier versions of this internet draft, also authored by inventor Hamid Ould-Brahim and others, had been published

more than one year prior to March 18, 2002 — including draft-ouldbrahim-bgp-vpn-00 (July 2000), draft-ouldbrahim-bgpvpn-auto-00 (November 2000), and draft-ouldbrahim-bgpvpn-auto-01 (March 2001). These internet drafts authored by inventor Hamid Ould-Brahim, as well as other, later versions of these drafts, cite a number of other prior art IETF documents that were not disclosed to the PTO in prosecuting the '167 patent. Similarly, the application for the '167 patent disclosed four other IETF internet drafts, all dated after the priority date of the '167 application. It was nowhere disclosed that earlier, prior art versions of these same drafts existed. The named inventors of the '167 Patent also contributed to other prior art IETF documents that were not disclosed to the PTO, including draft-kompella-ppvnp-l2vpn and draft-kompella-ppvnp-vpls. The PTO would not have allowed one or more claims of the '167 patent had it been aware of this undisclosed material information. The PTO, for example, would have concluded that the claims of the '167 patent were anticipated under section 102 (including by being described in a printed publication) and/or rendered obvious under section 103 in light of this prior art.

113. The named inventors, prosecuting attorneys, and/or other individuals associated with the filing and prosecution of the application that led to U.S. Patent No. 6,980,564 owed a duty of candor to the PTO. On information and belief, one or more of such persons knew of material information that he failed to disclose to the PTO, and acted with the intent to deceive the PTO.

114. In particular, late in the evening of Christmas Day, December 25, 2000, named inventor David Berman provided comments on the draft application for the '564 patent to in-house counsel Eric Jensen at Nortel, the attorney prosecuting the patent, Steve Saunders, and fellow named inventor Oscar Rodriguez.

115. Mr. Berman pointed out numerous errors and inaccuracies in the patent application. Most notably, he indicated that the application and claims as written in the application were overbroad in that some claimed embodiments reflected the existing state of the

art. Upon information and belief, these embodiments included the embodiment that Spherix now accuses Verizon of infringing, and which is claimed in claim 1 of the '564 patent.

116. None of Mr. Berman's corrections to the patent application was adopted. Instead, the application was filed on January 2, 2001, with the United States Patent and Trademark Office, and included a written description of the invention dated December 27, 2000, that contained no changes responsive to Mr. Berman's December 25, 2000 email. Again, most notably, the application continued to claim the embodiments reflecting the existing state of the art.

117. Furthermore, at no time during the prosecution of the original application filed on January 2, 2001, or the continuation of that application filed on June 19, 2001, did Mr. Berman or anyone else responsible for the prosecution of those applications disclose any document reflecting the prior art to the '564 invention.

118. Upon information and belief, Mr. Berman and prosecution counsel, at least, were aware of prior art that they understood to be material to the patentability of claim 1, including prior art pertaining to devices that functioned as network interface units that could provide a plurality of services to a customer's premises by translating messages received by the device in a second format received from the network medium into a first format that the service delivery unit could process. These devices included (i) a product known as Packet Port developed by ARRIS Interactive, a majority-owned subsidiary of Nortel Networks for whom the inventors were engaged in product development at the time of the claimed invention, (ii) a product sold by Cisco known as the uBR924 Cable Access Router, and (iii) Home PNA or HPNA devices, each such device capable of delivering at least data and telephony service through a single network interface unit.

119. On February 19, 2001, Mr. Berman signed a "Declaration and Power of Attorney For Patent Application," in which he acknowledged his "duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability" On information and belief, Mr. Berman and/or prosecution counsel knowingly violated that duty

by failing to disclose to the PTO information reflecting the state of the art material to claim 1. But for the failure of Mr. Berman and patent prosecution counsel to disclose this prior art, the PTO would have concluded that claim 1 of the '564 patent was anticipated under section 102 and/or rendered obvious under section 103 in light of the state of the art at the time the patent was filed.

120. Spherix's claims are barred, in whole or in part, because one or more claims of the Asserted Patents is unenforceable due to the commission of inequitable conduct and violation of the provisions of 37 C.F.R. 1.56 by Mr. Berman and/or prosecution counsel in procuring the Asserted Patents. On information and belief, Mr. Berman and/or prosecution counsel knew of material information that he failed to disclose to the PTO and acted with the intent to deceive the PTO. On information and belief, the PTO would not have allowed one or more claims of the Asserted Patents had it been aware of the undisclosed material information.

PRAYER FOR RELIEF

WHEREFORE, Verizon requests that the Court enter judgment in its favor and against Spherix as follows:

1. Dismissing, with prejudice, Spherix's claims for patent infringement against Verizon;
2. Denying all relief that Spherix seeks in its Complaint;
3. Finding this case to be exceptional under 35 U.S.C. § 285 and awarding Verizon its attorneys' fees and costs;
4. Awarding any further relief that the Court may deem just and appropriate.

DEMAND FOR JURY TRIAL

Verizon demands a jury trial on all claims and issues so triable.

DATED: November 7, 2014

Respectfully submitted,

Of Counsel for Defendants:

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CERTIFICATE OF SERVICE

I certify that on November 7, 2014, I will electronically file the foregoing with the Clerk of the Court using the CM/ECF system, which will then send notification of such filing (NEF) to the following:

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